Missouri Business Education Competencies
(Performance Standards)

MULTIMEDIA

Course Rationale: This area of instruction addresses the technology knowledge and skills required of students entering the workplace. The demand will continue to expand as businesses utilize multimedia functions including graphics, audio, video, web page design, and maintenance, and electronic presentation skills.

The following suggested competencies, developed by an advisory committee, are intended to serve as a basis for your course curriculum. The list is neither inclusive nor required in its entirety. You may select competencies from other lists, and develop competencies of your own to define the outcomes you expect your students to achieve. The Show-Me Standards identified provide a guide. If activities you choose better aligned with other Standards, you should align your competencies/objectives to those Standards instead of these shown here.

COMPETENCIES		SHOW-ME STANDARDS
A. Introductory Concepts		
1.	Define terms related to multimedia.	CA1, CA3, 1.2
2.	List hardware requirements for various types of media.	CA1, CA3, 1.2, 1.10
3.	Explain multimedia hardware standards.	CA1, 1.2, 4.1
4.	Compare categories of multimedia software (e.g., presentation, authoring, animation, sound).	CA3, 1.2, 1.6
5.	Identify platform differences (MAC, Windows, NT).	CA1, 1.6
6.	List types of files used in multimedia applications (e.g., EPS, GIF, JPG)	CA1, 1.4, 1.6, 1.8
7.	Manage files.	1.4, 2.7
8.	Access media resources.	1.4, 2.7
9.	Identify tools in toolbars and palettes in various software programs.	CA1, 1.4
10.	Apply tools in toolbars and palettes in various software programs.	2.7
11.	Download files (e.g., graphics, sound, video, animation).	2.7
12.	Explain import functions.	CA1, 4.1
13.	Determine import and export capabilities of various software packages.	CA1, 1.2, 4.1
14.	Proofread and correct multimedia documents.	CA1, 2.2
15.	Perform file compression.	1.4, 2.7
16.	Describe how businesses use the Internet.	CA1, 4.1
17.	Identify career/self-employment opportunities in multimedia production.	CA1, 2.6
18.	Identify design principles used in multimedia productions	CA1, 1.6, 4.1
19.	Use organizational tools to plan multimedia products (e.g., storyboarding, outlining, branching).	1.8, 2.7

B. Ethics		
1.	Demonstrate ethical behavior when designing multimedia applications.	4.4
2.	Explain key principles in the Electronic Users' Bill of Rights (e.g., safety, security, privacy).	SC8, 4.1
3.	Identify copyright and patent laws for multiple media (e.g., video, text, sound, pictures).	CA3, 1.5
C. Graphics		
1.	Create scanned images.	1.4, 1.8
2.	Determine appropriate file formats.	1.4, 1.6
3.	Manipulate scanned images (e.g., resizing, cropping, scaling, rotating).	1.4, 1.6
4.	Import graphics.	1.4, 1.6
5.	Edit graphics (e.g., color, filters, tints).	1.4, 1.7
6.	Manipulate graphics (e.g., resizing, cropping, scaling, rotating).	1.4, 1.8
7.	Use color tables (e.g., hue, saturation).	1.4, 1.8
8.	Create digital camera images.	2.7
9.	Create original drawings using illustration software.	1.4, 1.8
10.	Incorporate screen captures into multimedia productions.	1.4, 1.6, 1.8
11.	Create simple animations.	1.4, 1.6, 1.8
12.	Apply object linking in multimedia products.	1.4
D. Audio		
1.	Describe functions of hardware required for performing audio tasks.	CA1, 1.6
2.	Import sound files.	1.4, 1.8
3.	Create audio files (MIDI).	1.4, 1.8
4.	Access and capture recorded and live audio from a variety of sources (e.g., laser disk, CD-ROM, video, microphone).	1.4, 1.8
5.	Edit sound files.	1.4, 1.8, 2.2
E. Video		
1.	Access and capture video clips from a variety of sources (e.g., laser disk, CD-ROM, video camera).	1.4, 1.8
2.	Edit a video.	1.4, 1.8, 2.2
3.	Alter frames per second.	1.4, 1.8
4.	Queue a video.	1.4, 1.8
5.	Transfer digital video output to other media (e.g., videotape, disk, CD-ROM, web page).	1.4, 1.8
6.	Describe functions of hardware required to perform video tasks.	CA1, 1.6
F. Web Page Design		

1.	Define web page design principles	CA1, 1.5
2.	Evaluate web page design.	CA5, 1.5, 1.6, 1.8
3.	Define HTML (hypertext markup language).	CA1, 1.5
4.	Explain the capabilities of HTML.	CA1, 4.1
5.	Define creation, organization, and navigation of links.	CA1, 4.1
6.	Create storyboards.	CA1, CA4, 1.4, 1.8
7.	Design a web page with text, graphics, and tables.	CA1, CA4, 1.4, 1.8, 2.1
8.	Create hyperlinks (internal and external).	1.4
9.	Edit using HTML.	1.4, 2.2
10.	Apply external media (e.g., text, images, sound).	1.4
11.	Apply Internet etiquette.	4.4
12.	Evaluate file size as it relates to the Internet.	1.5
13.	Identify various browser software and their restrictions (e.g., Netscape Navigator, Microsoft Internet Explorer).	CA1, CA3, 1.2, 4.1
14.	Identify various HTML editing software (e.g., WYSIWYG, text-only).	CA1, CA3, 1.2
15.	Upload files to a web server.	1.4, 3.8
G. Electronic Presentations		
1.	Identify components of effective electronic presentations.	CA1, CA3, 1.6
2.	Demonstrate basic features of presentation software.	1.4
3.	Use master slides and templates.	1.4
4.	Edit master slides and templates.	1.4, 2.2
5.	Create master slides and templates using a variety of formats.	1.4, 1.6
6.	Draw and edit objects incorporating fills, borders, and lines.	1.4, 1.6, 2.2
7.	Incorporate audio and visual elements (e.g., sound, graphics, animation).	1.4, 1.6
8.	Incorporate transitions.	1.4, 1.6
9.	Apply builds to slides.	1.4, 1.6
10.	Apply timed settings.	1.4, 1.6
11.	Import files into a presentation (e.g., text, graphics, sound, video).	1.4, 1.6
12.	Prepare an electronic presentation using a variety of formats (e.g., text, graphics, bulleted lists).	1.4, 1.6, 1.8
13.	Identify components of an interactive presentation developed with authoring software.	1.4, 1.5
14.	Demonstrate basic features of authoring software.	1.4
15.	Develop an authoring tutorial using scripting commands.	1.4, 1.6, 1.8
16.	Field test a tutorial created with authoring software.	1.2, 1.7
17.	Evaluate peer-created tutorials.	CA5, 1.5, 1.7

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